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EXAMINER

SHELEHEDA, JAMES R

ART UNIT	PAPER NUMBER
2614	

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/732,498

Applicant(s)

FOOTER ET AL.

Examiner

James Sheleheda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it exceeds 150 words.

Appropriate correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

2. Claim 5 is objected to because of the following informalities:

In claim 5, line 1, "the router" should be changed to --a router--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-7, 9-11, 13-17, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,857,190) in view of Travaille et al. (Travaille) (6,067,107) and Leermakers (US2003/0105845A1).

As to claim 1, Brown discloses a system for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

one more application servers (Fig. 1; headend, 22 containing server system, 24); column 4, lines 8-11) including one more application programs for the input of information by a customer (column 4, lines 47-55), said application server being in electronic communication with one or more broadcast centers (wherein the headend is inherently communicating the information with a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

a broadcast center for communicating one or more application programs (column 4, lines 48-52) with a communications satellite (column 4, lines 41-44);

a communications satellite (column 4, lines 41-44);

one or more individual satellite dishes for receiving one or more application programs from the communications satellite in electronic communication with the communications satellite (wherein satellite dishes are inherently present for the local receiver to receive satellite communications; column 4, lines 41-44) and in electronic communication with one more integrated receiver/decoders (user interface unit, 26; column 4, lines 12-24);

one or more IRDS (user interface unit, 26; column 4, lines 12-24) in electrical communication with one or more Graphical User Interfaces (EPG; column 6, lines 45-58) for a customer to input information into the application program (column 6, lines 49-52),

said IRDs further comprising callback functionality (reporting events to the headend; column 7, lines 1-20) and memory (memory, 36) for storing a data log (column 7, lines 6-14) of customer transaction (column 6, lines 3-8) and navigation information (column 6, lines 48-52), wherein said IRDs are in electronic communication with one more interactive servers which receive callbacks from the IRDs (column 7, lines 16-25);

one or more interactive servers (server system, 24 containing event log manager, 56; column 7, lines 16-25) in electronic communication with one or more interactive data repositories (log database, 62); and

one or more IDRs (log database, 62) for storing data (column 8, lines 1-6).

While Brown discloses memory for storing a data log, I/O ports for sending callbacks and interactive servers which will receive the data and transmit it to the IDRs, he fails to specifically disclose the use of flash memory, and modems in the IRD in electronic communication with communications servers which receive the callbacks.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column

7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to transmit user data (paragraph 27), for the typical benefit of providing a upstream path for a client to transmit user data (paragraph 27), which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

It would have been obvious to modify Brown's system to include the use of flash memory, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television applications.

Additionally, it would have been obvious to modify Brown and Travaille's system to include modems in the IRD in electronic communication with communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream receiver and ensuring those signals are correctly received and communicated.

As to claim 3, Travaille additionally discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the database containing user responses (the IDR, 124) is in communication with a database (the IBS, 126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (124) is correlated with data in the subscriber information database (126; column 8, lines 61-64) for the typical benefit of providing a means to identify the subscriber who sent out the responses (column 8, lines 52-64).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille and Leermakers' system to include an interactive business system in communication with the IDR, wherein data in the IDR is correlated with data in the IBS, as further taught by Travaille, for the benefit of providing a means to ensure that received interactive television responses are associated with the correct television viewer.

As to claim 4, Brown, Travaille and Leermakers disclose wherein the communications server is a bank of modems (see Leermakers at Fig. 1, modem bank , 39; paragraph 22).

As to claim 5, Brown, Travaille and Leermakers disclose wherein a router in the interactive server identifies a particular interactive television action by a code (identifier in a source string; see Brown at column 8, lines 35-45) and routes it to the appropriate IDR (see Brown at column 8, lines 42-46).

As to claim 6, Brown, Travaille and Leermakers disclose wherein the application program is a banking application (banking services; see Brown at column 4, lines 48-52).

As to claim 7, Brown, Travaille and Leermakers disclose wherein the application program provides information to a customer (EPG information; see Brown at column 4, lines 48-52).

As to claim 9, Brown, Travaille and Leermakers disclose wherein the communication server, the interactive server, and the IDR are located at the same operating company (wherein they are all contained within the central facility; see Brown at Fig. 1, server system 24 and log database, 62 in headend, 22; and Leermakers at Fig. 1, modem bank, 39 in Network Control Center, 30).

As to claim 10, Brown, Travaille and Leermakers disclose wherein the communication server, the interactive server, the IDR and the IBS are located at the same operating company (wherein the communication server, interactive server and IDR are all contained within the central facility; see Brown at Fig. 1, server system 24 and log database, 62 in headend, 22; and Leermakers at Fig. 1, modem bank, 39 in Network Control Center, 30; and wherein the IBS is associated with the broadcaster and contains the billing information; see Travaille at column 8, lines 58-67).



As to claim 11, Brown, Travaille and Leermakers disclose wherein data in the IDR (database, 124 contained within in LDC, 122) is communicated to a central IDR (master data center, 128; see Travaille at Fig. 1; column 9, lines 6-17).

As to claim 13, Brown, Travaille and Leermakers disclose wherein a code in the data downloaded from the IRD (a unique terminal response; see Travaille at column 8, lines 52-61) is compared with the information in the IBS (database, 126) to allow identification of the customer (see Travaille at column 8, lines 58-64).

As to claim 14, Brown discloses a method for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

providing one or more application programs (banking, EPG and shopping services; column 4, lines 47-55) on one or more application servers (Fig. 1; headend, 22; column 4, lines 8-11);

transmitting the application programs to a broadcast center (wherein the headend inherently transmits the applications to a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

transmitting the application program from the broadcast center to a communications satellite (a DSS satellite; column 4, lines 41-44 and 58-62);

transmitting the application program from communications satellite to one or more individual satellite dishes (wherein the application is inherently transmitted to individual satellite dishes to enable receipt of the DSS signals; column 4, lines 41-44);

communicating the application program from the individual satellite dish to one or more integrated receiver/decoders (to allow receipt of the application at the user interface unit, 26; column 4, lines 41-44 and 58-62);

enabling a customer to input information (user inputs; column 6, lines 48-52), into an application program received by the IRD via a GUI (an EPG; column 6, lines 45-52);

inputting the information into a data log in memory in the IRD (column 7, lines 6-14);

transmitting the data log via call back from the IRD (reporting events to the headend; column 7, lines 1-20) to an interactive server (server system, 24 in the headend; column 7, lines 16-25);

parsing the individual customer navigation and transaction data from the data log (wherein the received data is separated for storage in different databases; column 8, lines 5-9); and

storing the individual customer navigation and transaction data in one or more interactive data repositories (databases, 62 in the headend; column 8, lines 1-9).

While Brown discloses memory for storing a data log and interactive servers which will receive the data and transmit it to the IDRs, he fails to specifically disclose the use of flash memory and communications servers for receiving callbacks.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column 7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to transmit user data (paragraph 27) which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

It would have been obvious to modify Brown's system to include the use of flash memory, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television applications.

Additionally, it would have been obvious to modify Brown and Travaille's system to include communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream server and ensuring those signals are correctly received and communicated.

As to claim 15, Travaille additionally discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the database containing user responses (124) is in communication with a database (126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (124) is correlated with data in the subscriber information database (126; column 8, lines 61-64) before being transmitted to a central facility (column 9, lines 6-17) for the typical benefit of providing a means to identify the subscriber who sent out the responses (column 8, lines 52-64).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille and Leermakers' system to include an interactive business system in communication with the IDR, wherein data in the IDR is correlated with data in the IBS, as further taught by Travaille, for the benefit of providing a means to ensure that received interactive television responses are associated with the correct television viewer.

As to claim 16, Brown, Travaille and Leermakers disclose wherein communication of the data in the IDR (database, 124) with the data in the IBS (database, 126) enables an operator of the IBS to identify the customer associated with the IDR (by cross referencing the identification code with the subscriber info; see Travaille at column 8, lines 58-66).

As to claim 17, Brown, Travaille and Leermakers disclose the step of communicating the data in the IDR (database, 124 contained with LDC, 122) with a central IDR (MDC, 128; see Travaille at Fig. 1; column 9, lines 9-17).

As to claim 21, Brown discloses a system for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

one more application servers (Fig. 1; headend, 22 containing server system, 24); column 4, lines 8-11) further including one more application programs for the input of information by a customer (column 4, lines 47-55), said application server being in electronic communication with one or more broadcast centers (wherein the headend is inherently communicating the information with a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

a broadcast center for communicating one or more application programs (column 4, lines 48-52) with a communications satellite (column 4, lines 41-44);

a communications satellite (column 4, lines 41-44);

one or more individual satellite dishes for receiving one or more application programs from the communications satellite in electronic communication with the communications satellite (wherein satellite dishes are inherently present for the local receiver to receive satellite communications; column 4, lines 41-44) and in electronic communication with one more integrated receiver/decoders (user interface unit, 26; column 4, lines 12-24);

one or more IRDS (user interface unit, 26; column 4, lines 12-24) in electrical communication with one or more Graphical User Interfaces (EPG; column 6, lines 45-58) for a customer to input information into the application program (column 6, lines 49-52),

said IRDs further comprising callback functionality (reporting events to the headend; column 7, lines 1-20) and memory (memory, 36) for storing a data log (column 7, lines 6-14) of customer transaction (column 6, lines 3-8) and navigation information (column 6, lines 48-52), wherein said IRDs are in electronic communication with one more interactive servers which receive callbacks from the IRDs (column 7, lines 16-25);

one or more interactive servers (server system, 24 containing event log manager, 56; column 7, lines 16-25) receiving the data log and placing the data into an interactive data repository in the form of a data table (log database, 62; column 8, lines 17-34).

While Brown discloses memory for storing a data log, I/O ports for sending callbacks and interactive servers which will receive the data and transmit it to the IDRs, he fails to specifically disclose the use of flash memory, modems in the IRD in electronic communication with communications servers which receive the callbacks and an interactive business system in electronic communication with the IDR, wherein the IBS has data which correlates with the IDR.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column

7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8) and

wherein the database containing user responses (IDR, 124) is in communication with a database (IBS, 126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (IDR, 124) is correlated with data in the subscriber information database (IBS, 126; column 8, lines 61-64) for the typical benefit of providing a means to identify the subscriber who the sent out the responses (column 8, lines 52-64).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to transmit user data (paragraph 27), for the typical benefit of providing a upstream path for a client to transmit user data (paragraph 27), which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

It would have been obvious to modify Brown's system to include the use of flash memory and an interactive business system in communication with the IDR, wherein data in the IDR is correlated with data in the IBS, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television and

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providing a means to ensure that received interactive television responses are associated with the correct television viewer.

Additionally, it would have been obvious to modify Brown and Travaille's system to include modems in the IRD in electronic communication with communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream receiver and ensuring those signals are correctly received and communicated.

As to claim 23, Brown, Travaille and Leermakers disclose wherein the data table is a relational data table (wherein the databases are ODBC compliant SQL servers and wherein SQL inherently operates with relational databases and tables; see Brown at column 11, lines 58-67 and column 12, lines 1-9).

As to claim 24, Brown discloses an integrated receiver/decoder (user interface unit, 26) for use in a system for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), wherein the system comprises:

one more application servers (Fig. 1; headend, 22 containing server system, 24); column 4, lines 8-11) further including one more application programs for the input of information by a customer (column 4, lines 47-55), said application server being in electronic communication with one or more broadcast centers (wherein the headend is



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inherently communicating the information with a broadcast center to transmit to users;  
column 4, lines 41-45 and 58-62);

a broadcast center for communicating one or more application programs (column 4, lines 48-52) with a communications satellite (column 4, lines 41-44);

a communications satellite (column 4, lines 41-44);

one or more individual satellite dishes for receiving one or more application programs from the communications satellite in electronic communication with the communications satellite (wherein satellite dishes are inherently present for the local receiver to receive satellite communications; column 4, lines 41-44) and in electronic communication with one more integrated receiver/decoders (user interface unit, 26; column 4, lines 12-24);

one or more IRDS (user interface unit, 26; column 4, lines 12-24) in electrical communication with one or more Graphical User Interfaces (EPG; column 6, lines 45-58) for a customer to input information into the application program (column 6, lines 49-52),

said IRDs further comprising callback functionality (reporting events to the headend; column 7, lines 1-20) and memory (memory, 36) for storing a data log (column 7, lines 6-14) of customer transaction (column 6, lines 3-8) and navigation information (column 6, lines 48-52), wherein said IRDs are in electronic communication with one more interactive servers which receive callbacks from the IRDs (column 7, lines 16-25);

one or more interactive servers (server system, 24 containing event log manager, 56; column 7, lines 16-25) receiving the data log and placing the data into an interactive data repository in the form of a data table (log database, 62; column 8, lines 17-34).

While Brown discloses memory for storing a data log, I/O ports for sending callbacks and interactive servers which will receive the data and transmit it to the IDRs, he fails to specifically disclose the use of flash memory, modems in the IRD in electronic communication with communications servers which receive the callbacks and an interactive business system in electronic communication with the IDR, wherein the IBS has data which correlates with the IDR.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver used to store viewer responses (column 7, lines 8-10) is flash memory (column 7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8) and

wherein the database containing user responses (IDR, 124) is in communication with a database (IBS, 126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (IDR, 124) is correlated with data in the subscriber information database (IBS, 126; column 8, lines 61-64) for the typical benefit of providing a means to identify the subscriber who the sent out the responses (column 8, lines 52-64).

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to

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transmit user data (paragraph 27), for the typical benefit of providing a upstream path for a client to transmit user data (paragraph 27), which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

It would have been obvious to modify Brown's system to include the use of flash memory and an interactive business system in communication with the IDR, wherein data in the IDR is correlated with data in the IBS, as taught by Travaille, for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television and providing a means to ensure that received interactive television responses are associated with the correct television viewer.

Additionally, it would have been obvious to modify Brown and Travaille's system to include modems in the IRD in electronic communication with communications servers which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream receiver and ensuring those signals are correctly received and communicated.

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5. Claims 18 and 19 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (5,857,190) in view of Travaille et al. (Travaille) (6,067,107), Leermakers (US2003/0105845A1) and Gessel et al. (Gessel) (5,889,954).

As to claim 18, Brown discloses a system for obtaining data regarding customer use of interactive television (Fig. 1; column 3, lines 65-67 and column 4, lines 1-7), comprising:

one more application servers (Fig. 1; headend, 22 containing server system, 24); column 4, lines 8-11) further including one more application programs for the input of information by a customer (column 4, lines 47-55), said application server being in electronic communication with one or more broadcast centers (wherein the headend is inherently communicating the information with a broadcast center to transmit to users; column 4, lines 41-45 and 58-62);

a broadcast center for communicating one or more application programs (column 4, lines 48-52) with a communications satellite (column 4, lines 41-44);

a communications satellite (column 4, lines 41-44);

one or more individual satellite dishes for receiving one or more application programs from the communications satellite in electronic communication with the communications satellite (wherein satellite dishes are inherently present for the local receiver to receive satellite communications; column 4, lines 41-44) and in electronic communication with one more integrated receiver/decoders (user interface unit, 26; column 4, lines 12-24);

one or more IRDS (user interface unit, 26; column 4, lines 12-24) in electrical communication with one or more Graphical User Interfaces (EPG; column 6, lines 45-58) for a customer to input information into the application program (column 6, lines 49-52),

said IRDs further comprising callback functionality (reporting events to the headend; column 7, lines 1-20) and memory (memory, 36) for storing a data log (column 7, lines 6-14) of customer transaction (column 6, lines 3-8) and navigation information (column 6, lines 48-52), wherein said IRDs are in electronic communication with one more interactive servers which receive callbacks from the IRDs (column 7, lines 16-25);

one or more interactive servers (server system, 24 containing event log manager, 56; column 7, lines 16-25) comprising a parser (event log manager, 56) of the data in the data log into particular actions (column 8, lines 17-34) and a router of the particular action data (wherein particular data is routed to particular databases; column 8, lines 17-34), said interactive server being in electronic communication with one or more interactive data repositories (log database, 62); and

one or more IDRs (log database, 62) for storing particular actions parsed in the interactive server (column 8, lines 17-34).

While Brown discloses memory for storing a data log, I/O ports for sending callbacks and interactive servers which will receive the data and transmit it to the IDRs and routing the particular data to local or remote databases (column 8, lines 5-16), he fails to specifically disclose modems in the IRD in electronic communication with

communications servers which receive the callbacks, the use of flash memory, an interactive business system in electronic communication with the IDR, wherein the IDR is in communication with a central IDR and a central IBS is in communication with the central IDR and encapsulating the data into appropriate protocol for users.

In an analogous art, Travaille discloses an interactive television system (Fig. 1; column 3, lines 60-67 and column 4, lines 1-20) wherein the memory in the broadcast receiver (120) used to store viewer responses (column 7, lines 8-10) is flash memory (column 7, lines 4-8) for the typical benefit of utilizing a memory which is readable and writeable and retains its contents after a power loss (column 7, lines 4-8);

wherein the database containing user responses (IDR, 124) is in communication with a database (IBS, 126) containing user account information (column 9, lines 39-53) and wherein the data in the response database (IDR, 124) is correlated with data in the subscriber information database (IBS, 126; column 8, lines 61-64) for the typical benefit of providing a means to identify the subscriber who the sent out the responses (column 8, lines 52-64); and

wherein the IDR is in communication with a central IDR (Fig. 1; AGG. RESP. DB, 130; column 9, lines 6-17), and a central IBS (subscriber information database, 126) is in communication with the central IDR (Fig. 1; AGG. RESP. DB, 130; column 9, lines 6-17). This provides the typical benefit of providing a single site capable of creating a comprehensive database of user information.

Additionally, in an analogous art, Leermakers discloses a broadcast satellite system (Fig. 1; paragraph 19) wherein a client (50) will use a modem (Fig. 2, 93) to

transmit user data (paragraph 27), for the typical benefit of providing a upstream path for a client to transmit user data (paragraph 27), which is electronic communication with a communications server (modem bank, 39; wherein a server is defined by IEEE standards as "a system component that performs operations required for the processing of a call.") contained at a central facility (Fig. 1; network control center, 30; paragraph 22). This provides the typical benefit of allowing communications between user modems and other systems to be performed (paragraph 22).

Furthermore, in an analogous art, Gessel discloses a network manager of a communications system (Fig. 1) wherein data is encapsulated in TCP/IP protocol before transmission (column 4, lines 30-38) for the benefit of allowing different host processors using different formats to communicate (column 4, lines 38-45).

It would have been obvious to modify Brown's system to include the use of flash memory, an interactive business system in communication with the IDR, and wherein the IDR is in communication with a central IDR and a central IBS is in communication with the central IDR, as taught by Travaille, for the benefits of utilizing a memory which is readable and writeable and retains its contents after a power loss for the storing of viewer responses to interactive television applications, providing a means to ensure that received interactive television responses are associated with the correct television viewer, and providing a single central facility in a interactive television system capable of receiving user information and compiling a single comprehensive database.

Additionally, it would have been obvious to modify Brown and Travaille's system to include modems in the IRD in electronic communication with communications servers

which receive the callbacks, as taught by Leermakers, for the typical benefit of providing a means for satellite broadcast receivers to transmit signals to an upstream receiver and ensuring those signals are correctly received and communicated.

Furthermore, it would have been obvious to modify Brown, Travaille and Leermakers' system to include encapsulating the data into appropriate protocol for users, as taught by Gessel, for the benefit of ensuring that transmitted data is sent in a protocol which is usable by the system receiving the data.

As to claim 19, Brown, Travaille, Leermakers and Gessel disclose wherein navigation data (EPG data) and transaction data (shopping data) are parsed by an application program interface (see Brown at column 8, lines 17-34) and distributed by a router (event log manager, 56) to IDRs (databases) of appropriate interactive television content servers (see Brown at column 8, lines 17-25).

6. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Travaille and Leermakers as applied to claim 1 above, and further in view of Gessel.

As to claim 2, Brown, Travaille and Leermakers disclose wherein the interactive server (see Brown at Fig. 1; server system, 24) comprises a parser (see Brown at Fig. 1; event log manager, 56) of the data in the data log (see Brown at column 8, lines 17-34), said interactive server being in electronic communication with one or more IDRs (see Brown at Fig. 1; log database, 62), and the IDR stores parsed information (see



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Brown at column 8, lines 17-34). While Brown, Travaille and Leermakers disclose transmitting the information to for database users (see Brown at column 8, lines 17-34) they fail to specifically disclose an encapsulator of the information into appropriate protocol for use.

In an analogous art, Gessel discloses a network manager of a communications system (Fig. 1) wherein data is encapsulated in TCP/IP protocol before transmission (column 4, lines 30-38) for the benefit of allowing different host processors using different formats to communicate (column 4, lines 38-45).

It would have been obvious to modify Brown, Travaille and Leermakers' system to include an encapsulator of the information into appropriate protocol for use, as taught by Gessel, for the benefit of ensuring that transmitted data is sent in a protocol which is usable by the system receiving the data.

As to claim 8, while Brown, Travaille and Leermakers disclose wherein the interactive server transmits the particular interactive television action to the IRDs (see Brown at column 8, lines 17-34), they fail to specifically disclose encapsulating the action into TCP/IP protocol.

In an analogous art, Gessel discloses a network manager of a communications system (Fig. 1) wherein data is encapsulated in TCP/IP protocol before transmission (column 4, lines 30-38) for the benefit of allowing different host processors using different formats to communicate (column 4, lines 38-45).

It would have been obvious to modify Brown, Travaille and Leermakers' system to include encapsulating the action into TCP/IP protocol, as taught by Gessel, for the benefit of ensuring that transmitted data is sent in a protocol which is usable by the system receiving the data.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Travaille and Leermakers as applied to claim 21 above, and further in view of Paul et al. (Paul) (6,466,972).

As to claim 22, while Brown, Travaille and Leermakers disclose a data table, they fail to specifically disclose a flat ASCII table.

In an analogous art, Paul discloses a computer network (Fig. 1; column 3, lines 59-67) which utilizes a data table in flat ASCII (column 8, lines 16-22) for the typical benefit of allowing the table to be easily updated using an ASCII editor.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille and Leermakers system to include the use of a flat ASCII table, as taught by Paul, for the benefit of allowing the stored data table to be easily updated using a typical ASCII editor.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Travaille and Leermakers as applied to claim 11 above, and further in view of Hendricks et al. (Hendricks) (6,052,554).

As to claim 12, while Brown, Travaille and Leermakers disclose communication between the IDR and the central IDR, they fail to specifically disclose wherein the communication is performed by satellite.

In an analogous art, Hendricks discloses a cable television distribution system (Fig. 1; column 5, lines 27-36) wherein satellite is used for communication between an operations center (202) and a cable headend (208; column 5, lines 56-63). The use of satellite provides the common benefit of allowing communication between distant systems without the need for a physical connection.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille and Leermakers' system to include wherein communication is performed by satellite, as taught by Hendricks, for the typical benefit of allowing interactive television system elements to communicate information without the need for any physical connections between them.

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown, Travaille, Leermakers and Gessel as applied to claim 18 above, and further in view of Hendricks et al. (Hendricks) (6,052,554).

As to claim 20, while Brown, Travaille and Leermakers disclose communication between the IDR and the central IDR, they fail to specifically disclose wherein the communication is performed by satellite.

In an analogous art, Hendricks discloses a cable television distribution system (Fig. 1; column 5, lines 27-36) wherein satellite is used for communication between an

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operations center (202) and a cable headend (208; column 5, lines 56-63). The use of satellite provides the common benefit of allowing communication between distant systems without the need for a physical connection.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Brown, Travaille, Leermakers and Gessel's system to include wherein communication is performed by satellite, as taught by Hendricks, for the typical benefit of allowing interactive television system elements to communicate information without the need for any physical connections between them.

### ***Conclusion***

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

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Signature: \_\_\_\_\_

**Certificate of Transmission**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (703) \_\_\_\_\_ - \_\_\_\_\_ on \_\_\_\_\_.  
(Date)

Typed or printed name of person signing this certificate:

\_\_\_\_\_

Signature: \_\_\_\_\_

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (703) 305-8722. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

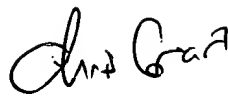
Application/Control Number: 09/732,498

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James Sheleheda  
Patent Examiner  
Art Unit 2614

JS

A handwritten signature in cursive script, appearing to read "Chris Grant".

CHRIS GRANT  
PRIMARY EXAMINER